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|---|--|--|--|
| UTILITY PATENT APPLICATION TRANSMITTAL <i>(Only for new nonprovisional applications under 37 CFR 1.53(b))</i> | | Attorney Docket No. 520.43241X00 | |
| | | First Inventor MIYAUCHI, AKIHIRO | |
| | | Title FUNCTIONING SUBSTRATE WITH A GROUP OF COLUMNAR MICRO PILLARS AND ITS MANUFACTURING METHOD | |
| | | Express Mail Label No. | |

| | |
|---|---|
| APPLICATION ELEMENTS SEE MPEP chapter 600 concerning utility patent application contents. | ADDRESS TO: Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria VA 22313-1450 |
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|---|---|
| 1. <input checked="" type="checkbox"/> Fee Transmittal Form (e.g., PTO/SB/17) <i>(Submit an original and a duplicate for fee processing)</i> 2. <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. 3. <input checked="" type="checkbox"/> Specification [Total Pages: 66] <i>(preferred arrangement set forth below)</i> -Descriptive title of the invention -Cross Reference to Related Applications -Statement Regarding Fed sponsored R & D -Reference to sequence listing, a table, or a computer program listing appendix -Background of the Invention -Brief Summary of the Invention -Brief Description of the Drawings (if filed) -Detailed Description -Claim(s) -Abstract of the Disclosure 4. <input checked="" type="checkbox"/> Drawing(s) (35 U.S.C. 113) [Total Sheets: 11] 5. Oath or Declaration [Total Sheets: _____] a. <input type="checkbox"/> Newly executed (original or copy) b. <input type="checkbox"/> Copy from a prior application (37 CFR 1.63 (d)) <i>(for continuation/divisional with Box 18 completed)</i> i. <input type="checkbox"/> DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) Named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b) 6. <input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76 | 7. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) 8. Nucleotide and/or Amino Acid Sequence Submission <i>(if applicable, all necessary)</i> a. <input type="checkbox"/> Computer Readable Form (CRF) b. Specification Sequence Listing on: i. <input type="checkbox"/> CD-ROM or CD-R (2 copies); or ii. <input type="checkbox"/> paper c. <input type="checkbox"/> Statements verifying identity of above copies |
|---|---|

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|---|
| ACCOMPANYING APPLICATION PARTS |
| 9. <input type="checkbox"/> Assignment Papers (cover sheet & documents(s)) 10. <input type="checkbox"/> 37 CFR 3.73(b) Statement <input type="checkbox"/> Power of Attorney <i>(when there is an assignee)</i> 11. <input type="checkbox"/> English Translation Document <i>(if applicable)</i> 12. <input type="checkbox"/> Information Disclosure Statement (IDS)/PTO-1449 <input type="checkbox"/> Copies of IDS Citations 13. <input type="checkbox"/> Preliminary Amendment 14. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503) <i>(Should be specifically itemized)</i> 15. <input type="checkbox"/> Certified Copy of Priority Document(s) <i>(if foreign priority is claimed)</i> 16. <input type="checkbox"/> Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. 17. <input checked="" type="checkbox"/> Other: Claim For Priority; Figs.1-17 |

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: _____

Prior application information: Examiner: _____ Art Unit: _____

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation **can only** be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

| | | | |
|---|-----------|--|--|
| <input checked="" type="checkbox"/> Customer Number 020457 | | OR <input type="checkbox"/> Correspondence address below | |
| Name ANTONELLI, TERRY, STOUT & KRAUS, LLP | | | |
| Address | | | |
| City | State | Zip Code | |
| Country | Telephone | Fax | |
| Name (Print/Type) Alan E. Schiavelli | | Registration No. (Attorney/Agent) 32,087 | |
| Signature <i>[Signature]</i> | | Date October 30, 2003 | |

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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 22386 U.S. PTO
 10/695939
 103003

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**FEE TRANSMITTAL
for FY 2004**

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT (\$)** 942.00**Compleat if Known**

| | |
|----------------------|-------------------|
| Application Number | |
| Filing Date | October 30, 2003 |
| First Named Inventor | MIYAUCHI, AKIHIRO |
| Examiner Name | |
| Art Unit | |
| Attorney Docket No. | 520.43241X00 |

METHOD OF PAYMENT (check all that apply)
☐ Check ☒ Credit Card ☐ Money ☐ Other ☐ None
Order
☒ Deposit Account:
 Deposit
Account
Number
Deposit
Account
Name

01-2135

Antonelli, Terry, Stout & Kraus, LLP

The Director is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) during the pendency of this application.☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description | Fee Paid |
|----------------------------|----------------------------|------------------------|----------|
| 1001 770 | 2001 385 | Utility filing fee | 770 |
| 1002 340 | 2002 170 | Design filing fee | |
| 1003 530 | 2003 265 | Plant filing fee | |
| 1004 770 | 2004 385 | Reissue filing fee | |
| 1005 160 | 2005 80 | Provisional filing fee | |

SUBTOTAL (1)

770

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

| | Extra Claims | Fee from below | Fee Paid |
|--------------------|--------------|----------------|----------|
| Total Claims 19 | -20** = 0.00 | x 18.000 | = 0.00 |
| Indep. Claims 5 | -3** = 2 | x 86.00 | = 172.00 |
| Multiple Dependent | | 290.00 | = 0.00 |

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description |
|----------------------------|----------------------------|--|
| 1202 18 | 2202 9 | Claims in excess of 20 |
| 1201 86 | 2201 43 | Independent claims in excess of 3 |
| 1203 290 | 2203 145 | Multiple dependent claim, if not paid |
| 1204 86 | 2204 43 | ** Reissue independent claims over original patent |
| 1205 18 | 2205 9 | ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) \$ 172.00

**or number previously paid, if greater; For Reissues, see above.

3. ADDITIONAL FEES

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description | Fee Paid |
|----------------------------|----------------------------|--|----------|
| 1051 130 | 2051 65 | Surcharge - late filing fee or oath | |
| 1052 50 | 2052 25 | Surcharge - late provisional filing fee or cover sheet | |
| 1053 130 | 1053 130 | Non-English specification | |
| 1812 2,520 | 1812 2,520 | For filing a request for <i>ex parte</i> reexamination | |
| 1804 920* | 1804 920* | Requesting publication of SIR prior to Examination action | |
| 1805 1,840* | 1805 1,840* | Requesting publication of SIR after Examiner action | |
| 1251 110 | 2251 55 | Extension for reply within first month | |
| 1252 420 | 2252 210 | Extension for reply within second month | |
| 1253 950 | 2253 475 | Extension for reply within third month | |
| 1254 1,480 | 2254 740 | Extension for reply within fourth month | |
| 1255 2,010 | 2255 1,005 | Extension for reply within fifth month | |
| 1401 330 | 2401 165 | Notice of Appeal | |
| 1402 330 | 2402 165 | Filing a brief in support of an appeal | |
| 1403 290 | 2403 145 | Request for oral hearing | |
| 1451 1,510 | 1451 1,510 | Petition to institute a public use proceeding | |
| 1452 110 | 2452 55 | Petition to revive - unavoidable | |
| 1453 1,330 | 2453 665 | Petition to revive - unintentional | |
| 1501 1,330 | 2501 665 | Utility issue fee (or reissue) | |
| 1502 480 | 2502 240 | Design issue fee | |
| 1503 640 | 2503 320 | Plant issue fee | |
| 1406 130 | 1460 130 | Petitions to the Commissioner | |
| 1807 50 | 1807 50 | Processing fee under 37 CFR 1.17(q) | |
| 1806 180 | 1806 180 | Submission of Information Disclosure Stmt | |
| 8021 40 | 8021 40 | Recording each patent assignment per property (times number of properties) | |
| 1809 770 | 2809 385 | Filing a submission after final rejection (37 CFR § 1.129(a)) | |
| 1810 770 | 2810 385 | For each additional invention to be examined (37 CFR § 1.129(b)) | |
| 1801 770 | 2801 385 | Request for Continued Examination (RCE) | |
| 1802 900 | 1802 900 | Request for expedited examination of a design application | |

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)

0.00

SUBMITTED BY**Complete (if applicable)**

| | | | | | |
|-------------------|--------------------|-----------------------------------|--------|-----------|--------------|
| Name (Print/Type) | Alan E. Schlavelli | Registration No. (Attorney/Agent) | 32,087 | Telephone | 703-312-6600 |
| Signature | | | | Date | 10/30/2003 |

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

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